

**Plastics welding personnel - Qualification testing of
welders - Thermoplastics welded assemblies**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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|---|--|
| See Eesti standard EVS-EN 13067:2012 sisaldab Euroopa standardi EN 13067:2012 ingliskeelset teksti. | This Estonian standard EVS-EN 13067:2012 consists of the English text of the European standard EN 13067:2012. |
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English Version

**Plastics welding personnel - Qualification testing of welders -
Thermoplastics welded assemblies**

Personnel en soudage des plastiques - Épreuve de
qualification des soudeurs - Assemblages soudés
thermoplastiques

Kunststoffschweißpersonal - Anerkennungsprüfung von
Schweißern - Thermoplastische Schweißverbindungen

This European Standard was approved by CEN on 22 September 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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Foreword

This document (EN 13067:2012) has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13067:2003.

In this revision, the scope of this standards includes solvent welding: socket and covers the welding of the polypropylene (PP) lining membranes (group 9: PP).

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This standard covers the principles to be observed in the qualification testing of welder performance for the welding of thermoplastic materials.

The ability of the welder to follow verbal or written instructions and testing of his skill are important factors in ensuring the quality of the welded product.

This standard is intended to provide the basis for the mutual recognition by examining bodies for qualification relating to welders competence in the various fields of application.

1 Scope

This European Standard specifies the method of testing the knowledge and skill of a welder who is required to carry out welds on thermoplastics in new constructions and repair work.

The skill examination of a welder is an essential condition for the assurance of the quality of the welding work.

The application of this standard guarantees that the examination is carried out according to a uniform test procedure.

This European Standard applies when the contractor or the authorities responsible for the application require it.

Gas and water utility network industries with alternative qualification programmes are excluded from this standard.

This European Standard applies to the following welding processes:

- hot gas welding: round nozzle, high speed nozzle, wedge;
- extrusion welding;
- heated tool welding: butt, saddle, socket, wedge;
- electrofusion welding: socket, saddle;
- solvent welding: socket.

This European Standard applies to the welding of the following products:

- sheet;
- pipe;
- fittings;
- lining membrane.

This European Standard covers the welding of the following groups of materials:

a) for sheets, pipes and fittings:

- 1) group 1: PVC (including all kinds of PVC-U, PVC-C), ABS;
- 2) group 2: PP (including all kinds of PP);
- 3) group 3: PE (including all kinds of PE);
- 4) group 4: PVDF;
- 5) group 5: ECTFE or PFA or FEP;

b) for lining membranes:

- 1) group 6: PVC-P;

- 2) group 7: PE (including all kinds of PE);
- 3) group 8: ECB;
- 4) group 9: PP.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12814-1, *Testing of welded joints of thermoplastics semi-finished products — Part 1: Bend test*

EN 12814-2:2000, *Testing of welded joints of thermoplastics semi-finished products — Part 2: Tensile test*

EN 12814-4, *Testing of welded joints of thermoplastics semi-finished products — Part 4: Peel test*

EN 12814-8, *Testing of welded joints of thermoplastics semi-finished products — Part 8: Requirements*

EN 13100-1, *Non destructive testing of welded joints of thermoplastics semi-finished products — Part 1: Visual examination*

EN 14728, *Imperfections in thermoplastic welds — Classification*

EN ISO/IEC 17024:2003, *Conformity assessment — General requirements for bodies operating certification of persons (ISO/IEC 17024:2003)*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)*

3 Terms and definitions

For the purposes of this document, the terms and definitions from EN ISO/IEC 17024:2003 and the following apply.

3.1

AD-WLD break

failure mode in an extrusion welded membrane peel test specimen where the failure is through the weld material

3.2

certificate issuing authority

establishment responsible for approving the PWE and or the Invigilator

3.3

invigilator

qualified person approved by Certificate Issuing Authority (CIA) who can supervise the practical and theoretical tests

Note 1 to entry: 3.3 and 3.5 can be the same person.

3.4

manufacturer

company, contractor or organisation who is responsible for the welding